

Japan's Resource Circulation Strategy for Plastics (May 2019)

Background

- ◆Low rate of plastic waste usage and environmental pollution from marine plastics etc. as global issues
- ◆ Japan has taken the lead of domestic treatment and 3Rs in addition to making global contributions. On the other hand, challenges such as the second highest amount of plastic container and packaging waste per capita and import restrictions in Asian countries

Key Strategies Basic Principle: "3Rs + Renewable" [Milestones] Reduce the use of single-use plastics ("valuing" such as mandatory charge on plastic <Reduce> Reduce bags etc.) etc. (1) Cumulative suppression of 25% of single-use plastics by ➤ Promote the development and use of substitutes for Petroleum based plastics 2030 Easy-understanding and effective separate collection and recycling of plastic resources <Reuse/Recycle> > Thorough land collection of fishing equipment etc. > Minimize costs and maximize the effective use of resources through collaboration and (2) Reusable/recyclable design by 2025 Recycle overall optimization (3) Reuse/recycle 60% of containers and packaging by 2030 Development of domestic resource circulation system given the embargoes of Asian (4) Effective use of 100% of used plastics by reuse and Fair and optimized recycling system which promotes innovation recycling etc. by 2035 <Recycling and Bio-based Plastics> Improve usage potential (support technical innovation and infrastructure development) Recycled Measures to stimulate demand (green public procurement, usage incentives etc.) (5) Double the use of recycled content by 2030 materials ➤ Handling of chemical ingredient information for recycling Bio-(6) Introduce about 2 million tons of bio-based plastics by ➤ Use bio-based plastics such as for burnable waste bags plastics 2030 Bio-plastic introduction roadmap/venous system management integration Aimed for the prevention of marine pollution caused by the outflow of plastic waste (marine plastic zero emission) Marine > Eradicate littering, illegal dumping, and proper disposal > Microplastic discharge suppression measures (thorough reduction of **Plastic** > Recovery of coastal drift items etc. microbeads in scrub products by 2020 etc.) ➤ Understand the actual state of marine waste (advanced monitoring methods) Measures Promote alternative innovation > Support effective measures of developing nations (international cooperation and business development through exporting order-made packaging of Japan's soft International and hard infrastructure and technology etc.) **Development** > Construction of global monitoring and research network (marine plastic distribution, study of ecological impacts etc., standardization of monitoring methods etc.) > Establishment of social systems (soft and hard recycling infrastructure and supply chain structuring) > Promote resource circulation related industries > Technology development (renewable resource substitutes, innovative recycling technologies, Infrastructure consumer lifestyle innovation) > Information infrastructure (ESG investment, ethical > Study and research (impact of microplastics, discharge conditions, discharge suppression measures) consumption) Collaboration (develop "Plastics Smart" to bring efforts under one flag) > Infrastructure for overseas expansion

- ◆ Not only **solve worldwide resource** and **environmental issues, including the Asia-Pacific Region,** but also realise **economic growth** and **employment creation** ⇒ Contribute to **sustainable development**
- ◆ Promote necessary investment and innovation (in technology and consumer lifestyle) by aiming to achieve milestones through collaboration with all the citizens

Overview of the Act on Promotion of Resource Circulation for Plastics Promulgated June 11, 2021

Session of the Diet

This Act addresses whole lifecycle of plastics(i.e., from designing products to disposing plastic waste) and involves all stakeholders in promoting "3R+Renewable" and increasing circularity

■ Background

In response marine plastic pollution, climate change, and foreign waste import regulations, domestic circulation of plastic resources is increasingly important. Since plastics are used in many varieties of products, circulation system for plastics needs to be enhanced comprehensively.

■ Main contents

1. Basic Policy

- To promote circulation of plastics in a comprehensive and planned way, basic policy includes:
 - Design for the Environment by manufacturers
 - > Reduction of single-use plastics by retailers and service providers
 - > Separation, collection and recycling of plastic waste by municipalities and private sectors

2. Measures along life cycle of plastics

[Guidelines for Design for the Environment]

Develop guidelines for Design for the Environment for manufacturers and establish a mechanism to certify products designed in accordance with the guidelines.

> The government procures preferentially the certified products (under the Act on Promoting Green Procurement) and provides financial support to the manufactures.



<Replacement Bottle>

[Reduction of Single-use Plastics]

• Set criteria for retailers and service providers to reduce single-use plastics

> The competent ministers may issue recommendations and orders to suppliers who provide large amounts of single-use plastics when their actions are found significantly insufficient in light of the criteria.



<Examples of Single-Use Plastics>

[Separate Collection and Recycling by Municipalities]

- Municipalities can recycle plastic product waste effectively under the current recycling scheme for containers and packaging.
- Municipalities develop a recycling plan in collaboration with recyclers.
- >When the plan is approved by the competent ministers, the recyclers can recycle plastics without sorting and bailing by municipalities.



[Collection and Recycling by Manufacturers and Retailers1

- Manufacturers and retailers develop a plan to collect and recycle their used products.
- >When the plan is approved by the competent ministers, the manufacturers and retailers can recycle without service permission under the Waste Management Act.



<In-store collection>

[Recycling by Waste Generators]

- Set criteria for waste generators to reduce and recycle plastic waste.
- ➤ The competent ministers may issue recommendations and orders to waste generators who generate large amounts of plastics when their actions are found significantly insufficient in light of the criteria.
- Waste generators develop a recycling plan.
- ➤ When the plan is approved by the competent ministers, the waste generators can recycle without service permission under the Waste Management Act

♣: Flow of plastics over the entire lifecycle

(1) Designing and Manufacturing Stages

To attain a society in which **environmentally friendly products** are certified by the government and consumers can choose

Structures and materials (such as the use of alternative materials and recycled plastics) are clearly indicated as <u>design guidelines</u> for manufacturers and others.

Targets all products that use plastic.

Structure>				
(1) Reduction of amount	(2) Simplification of packaging		(3) Long-term use and long service-life	
(4) Use of components that are easy to reuse or re-use of components	(5) Use of single material		(6) Easier disassembly and separation	
(7) Easier collection and conveyance	(8) Easier crushing and incineration			
Materials>				
(1) Alternatives to materials other than plastic		(2) Use of materials	(2) Use of materials that are easy to recycle	
(3) Use of recycled plastics		(4) Use of bioplastic	os .	

<Pre><Pre>color = Product Lifecycle Evaluation>

The government certifies products that are particularly good compared to similar products, and the government takes the
initiative to procure certified products.

Determined separately for each product field.

(2) Sales and Provision Stages

Streamlining the use of disposable plastics, and accelerating lifestyle transformations

		Target Produc	ts		Target Industry
Fork	Spoon	Table Knife	Stirrer	Straws	Various product retailers (including those without stores): General supermarkets, department stores, and the like Food and beverage retailers (excluding vegetable and fruit retailers, meat retailers, fresh fish retailers and liquor retailers, and including those with no stores): convenience stores, grocery stores, western confectionery stores, and others Hotel Industry: Hotels, inns, and the like Eating and Drinking Establishments: Restaurants, coffee shops, and the like Take-out and delivery catering services: Food delivery, and the like
Hair Brush	Comb	Razor	Shower Cap	Toothbrush	Hotel Industry: Hotels, inns, and the like
	Hang	gers	Clothes cov	vers .	Various product retailers (including those without stores): General supermarkets, department stores, and the like Laundry Industry: Cleaners, and the like

^{*} Even if the main business does not fall under the above covered business types, if part of the business activities fall under the above covered business types, the scope of the business is targeted.

- <u>Set goals</u>, implement initiatives according to plan to achieve them.
- Select and implement initiatives such as point redemption, charging, and conversion to alternative materials.
- The requirement for large-volume suppliers subject to recommendations is 5 tons or more per year (in the case of retail stores, this corresponds to a business scale of about 10 stores).

(3) Discarding/collection/recycling Stages

Promote efficient collection and recycling of all plastics

		Until Now	From Now
me	Container Packaging	Recycle	Recycle
Р	Plastic Products	Burnable Waste and Others	Recycle
	Industry Waste	Proper Treatment	3R

<Conceptual View of Separate Collection of Plastic Resources by Municipalities>



Apply the **support measures** to the 2022 budget request so that **the initiatives for business operators**, **municipalities and consumers** can be implemented smoothly and properly.

The government will undertake steady system operations.

Aim for a circular economy business market of more than ¥80 trillion yen by 2030.